

5000 B.C.



8,000 yrs ago  
5000 BC

More

Early Neolithic or New Stone Age  
Near JIATU, China

Man with pots etc  
included 2 flutes

Bone flutes

In Europe flutes have been  
found in graves even more  
ancient

5000 BC

People of U<sub>r</sub> in Mesopotamia had a high degree of culture. From this city Abraham (c. 2000 BC) is supposed to have departed to become the father of the Hebrews. From Cuneiform Tablets we know that these people of the Euphrates valley had a Cal with a 7-day week, a day

with 12 periods of 2 hours each,  
but this knowledge was lost to  
the world when barbarians destroyed  
the early civilization.

5000 BC

Gold and Copper objects made in the  
Balkans

UBAID Culture established in Mesopotamia;  
Irrigation agriculture supports  
large concentrated population

5000 B.C.

## LIFE AFTER DEATH

Early in their history the Egyptians came to believe in a life after death & RESURRECTION

He believed he would win happiness beyond the grave if he acted decently toward his fellow men while he was alive.

5000 to 4000 BC

Schena

Between 5000 & 4000 BC, it seems  
the people who made the carvings  
& paintings on T ossili plateau were  
gradually supplanted by  
a paler copper-skinned race  
who added to the galleries  
still later paintings. 1050 BC  
1500 BC  $\pm$  500 were added - depicted  
soldiers wearing bell-shaped

tunes & riding horse-drawn chariots

51700c

Wet rice farming established in  
Hemudu near the East Coast of China.

Sea level rise culminated in the  
flooding of coastal settlements in  
Australia and the detachment  
of New Guinea and Tasmania

5077 BC.

First cultivation of maize in the  
TEHUACAN Valley, Mexico

Cultivation of bottle gourd (a  
species of Mesoamerican origin) in  
eastern North America; used as  
a container.

Beginnings of limited cultivation in  
the lower Amazon.

5000BC

The area around the Nile became suitable for farming

5000 BC  
7500 Y A

Neolithic age  
Change from hunting and  
gathering to agriculture

5000 BC

There is evidence that by 5000 BC pumpkins and squash and other crops were grown in Central America and Peru

By then the mammoth and other huge animals had become extinct

5000 BC

Dunham of Flanders Univ.  
in Adelaide, Australia have  
collected strong evidence to  
show that BANANAS were  
first found in the  
highlands of New Guinea  
at least 7000 years ago

Ca. 5000 - 3000 BC

China

Neolithic culture called  
YANG SHAO

5070 BS

TX

Another distinctive culture emerged possibly from later and racially distinct arrivals on the continent.

5000BC

McDermott (molecular Archaeologist) believes the first graves were made at least 7000 years in the Caucasuses. Spread quickly: down the Tigris & Euphrates rivers and west to Turkey and Greece

5000BC

People in Peru & Central America were cultivating TEOSINTE (the ancestor of domesticated maize) but they were not eating the small cobs with hard kernels of little nutritional value. They probably used the stalks (high in sugar) to ferment into a drink - maize stalk beer

5000 BC

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There was a massive flood  
in the Black Sea region.  
This is probably the  
flood of the Bible

5000 BC  
7,000 YA

An ancient jar yielded the  
oldest known evidence of  
wine making from at  
least 7000 yrs ago

7, K A 612 ago

Sheep were domesticated,  
crops were cultivated

People of southern Mexico  
began to raise corn.

Global average Temperatures were  
considerably warmer than today.  
Also more rainfall. No evidence

for any large deserts of that time have  
been found.

c 5000 BC

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The first ever metal tools and weapons were made in the Near East about 7,000 yrs ago

7000 yrs ago = 5000 BC.

Carnac. One of the most baffling sites in the world, Carnac, on the coast of Brittany in France, has 11 rows of standing stones called menhirs. These stones stretch for 4 miles (6.5 km) and there are more than 3000 of them - the oldest date from 7,000 yrs ago. We know they served some religious or magical purpose, but today no one has the slightest idea what this was.

CS000AC

The world's first civilizations began to emerge along the banks of rivers where the land was extremely rich for farming.

The Sumerians, Assyrians and Babylonians built magnificent cities and temples in the fertile plains between the Tigris and Euphrates rivers. The Ancient

Egyptians flourished along the Nile River.

5000 BC

Bronze Age

Invention of the wheel.  
Applied not only to transportation  
(Chariots and Carts) but also to  
ceramics and architecture

5000 BC

Perhaps as early as 5000 BC in  
near East copper began to take the  
place of stone for weapons and  
implements. Pure copper was too soft  
but a mixture of copper and tin could  
produce a very hard substance.  
This alloy was called bronze &  
the next cultural period called  
the Bronze Age

5000 B.C.

The Neolithic dead of high rank were buried in chambers made with gigantic stone blocks. Upright pillars of dressed stone were erected (Ex. Stonehenge) (Enter Island)

500 BC

## Full Neolithic

Domestication of animals and plants  
and the building of houses.

(i.e. the invention of agriculture)

The growing of barley, wheat, millet  
and lentils gave man a fairly  
permanent and reliable

food supply. Population increased  
men became sedentary. He had to stay  
near his fields. Beginnings of private

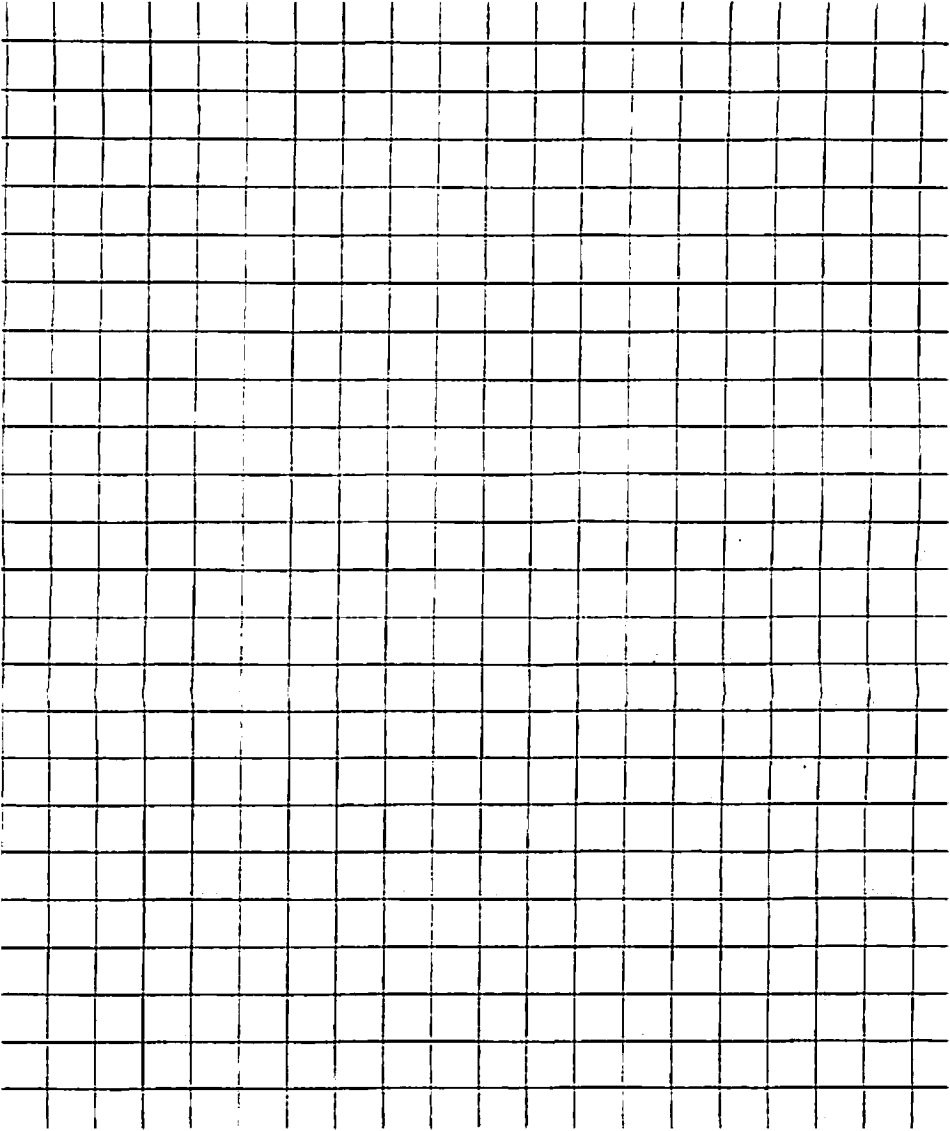
ownership

Religion took on a new significance  
Talented persons began to specialize in  
the making of weapons, tools etc. and  
traded them to the farmers for food.  
Thus the division of labor

Domesticated animals now included  
cattle, swine, sheep, and goats. These  
animals were imported from the Near  
East into Europe and crossed with native  
wild European varieties

5000 BC

Perhaps as early as 5000 BC in the Near East copper began to take the place of stone for weapons and implements. Pure copper was found to be too soft and malleable, and some early metal workers discovered that if he made an alloy or mixture of copper and tin he could produce a very hard substance which was much more satisfactory. This alloy we call bronze, and the next cultural period is known as the Bronze Age. The Bronze Age began in Egypt and Mesopotamia before 3000 BC, and reached Europe a little over a thousand years later.



1582 AD (4713 BC)

Joseph Scaliger devised the Julian period.  
Named after his father Julius

Scaliger had Julian Day (JD) #0  
begin at noon, Jan. 1, 4713 B.C. the  
most recent time that three major  
chronological cycles began on the same  
day.

1) the 28-year solar cycle, after dates  
in the Julian Cal. (e.g. Feb. 11)  
return to the same day of the week  
i.e. Monday.

- 2) The 19-year lunar cycle, after which the phases of the moon return to the same date of the year
- 3) The 15-year indiction cycle used in ancient Rome to regulate taxes.

It will take 7980 years to complete the period, the product of 28, 19, and 15.

5000 BC

In the Full neolithic, new techniques of stone working appeared. Some implements were now ground & polished into the desired shapes. This method worked best for axes, hammers, hoes, and club heads.

(American Indians used both old & new methods).

5000 BC

The agricultural revolution  
around 7000 BP or 5000 BC  
gave cultivated plants such as corn  
and beans

5000 BC  
7,000 yrs ago → 1 AD.

Stage called Archaic  
(Paleo Indians)



c 5000 B.C.

The first ever metal tools  
(made from copper) are made in  
the Near East.

5000 BC

Copper, first shapable metal,  
smelted in Persia.

c 5000BC

Egypt

Egypt was once a savanna where elephants and gazelles grazed and humans hunted & gathered their food

About 7000 yrs ago the climate changed, and all but the land closest to the Nile turned to desert. People began to farm by the River Nile and form communities, But

in the north became an important Trade  
center. In the South - NAQÂDA and  
HIERAKONOPOLIS became centers of  
population

5000 - 4000 BC

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UR (south of Uruk) near  
mouth of Euphrates

5000-1800 BC

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Luzark (on Tigris - near mouth)

SOTOBC

From diminutive plants (weopish  
fragments, about an inch long,  
An ear of wild corn) Indians  
began domesticating corn as  
early as SOTOBC

Probably Central Mexico  
Tehuacán Valley.

Maize sprang from a grass native  
to Mexico. It took only a thousand

years for the Indians to transform  
wild corn into primitive domesticated  
corn. (By the time the Aztec Indians)

5000 BC  $\rightarrow$  4000 BC

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Nippur (not far from  
Euphrate - north of Uruk)

5000 B.C.

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Copper used in trade in  
Mediterranean area.

5000 BC

7000 YA

## DENDRO CHRONOLOGY

otherwise known as tree-ring dating.  
This method is used to date wooden structures and objects from archaeological sites by comparing the pattern of growth rings with an established master sequence for tree-ring width over the last 7000 yrs.

C 5000 BC → 2000 BC etc

for pottery  
Aging

Thermoluminescence:

(means "giving out light when heated") a scientific dating method ~~based~~ based on the fact that when pottery is heated, it will give out light that can be measured. The more light that is given out, the older the object

5000 BC

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wheat has been cultivated for  
at least 7000 yrs in every  
continent except Antarctica.

5000BC (7000YA)

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More than 6000 yrs before the Inca Empire, an ancient Pacific Coast culture began mummifying its dead.

(Nat Geo p968 3/1995)

They have found a young boy's body stuffed with earth and covered with ash paste; his skull topped with a wig of human hair.

CHINCHOKKO people had been  
mummifying their people fully 7000  
yrs before the Nile Valley.

Earliest known date is 5050 BC

c 5000 BC

In Tigris - Euphrates, there clustered many cities. Each such city was a "state" by itself, under its own king, and it controlled the surrounding hamlets and farming territory.

Each city had a literature of its own

Four leading cities - ACCAD (AGADE),

UR, BABYLON, and NINEVEH

About 5000 BC

There were about 40 petty states in the land that was to become Egypt.

Each was ruled by a king. Memphis in the lower valley, and Thebes 350 miles farther up the river were the greatest of many royal cities.

5000 BC

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The rock giraffes of Niger, Africa,  
were Carved (South Central Sahara)

They have made silicone  
molds of these giraffes  
& installed in the Louvre

5000BC

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The oldest records yet found  
in Egypt reach back to about  
5000BC.

At that time the use of  
Bronze was already well  
advanced

5000 BC to 3000 BC

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Copper Age

5000 BC

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Copper used in trade  
in Mediterranean Area.

c 5000 BC

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Egyptians performed religious  
dances.

5000 BC

Wheat has been cultivated  
for more than 7000 yrs in every  
continent except Antarctica

5000BC

The first undeniably food-producing villages appear not in the swampy southern river valleys but in the grassy hill country on the flanks of the Fertile Crescent. By about 5000BC people were living in clusters of mud houses, growing wheat, barley, and peas, and probably provided with domesticated sheep and goats.

5000 BC

1912 Dates J-BK

The royal palace of the  
Babylonians at TEL-LO or  
SHIRUP SHIRPURIA dates back  
to 5000 BC, though it was  
restored by King BUDEA

## ANIMISM

the hypothesis, origin with  
Pythagoras And Plato, that the universal  
soul (Anima Mundi) no matter  
how conceived, is the cause or  
principle of life

Belief that within every object  
dwells an individual spirit or force  
which governs its existence. It  
has been said that upon this concept

rests the historical structure of religion

5000 B.C.

The oldest of Jericho's houses are 7000 yrs old, with their round walls, resemble Bedouin's tents.

But the art of pottery was as yet unknown among their inhabitants.

5000 BC  
7000 YA

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Felis Catus turned up relatively recently in evolution. Probably relative of African Wild Cat

Domestication coincided with a shift from nomadic life to a permanent settlement

Mud brick houses appeared along the Nile. Granaries attracted rats which attracted Cats.

5000 BC

By 5000 BC an increasingly arid climate had reduced the grazing lands of Egypt, turning them into desert and forcing nomads to settle closer to the Nile.

Long before the pharaohs built the pyramids, Egypt's glory was the agricultural wealth of its delta.

Sorobc

7,000 yrs ago

Central America

By 7,000 yrs ago a domesticated  
corn-like plant (maize) appeared

5000 BC

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Irrigation was introduced.

5000 BC

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From Cuneiform tablets we know that the people of the Tigris Euphrates valley had a Cal with 7 day week, a day with 12 periods of 2 hours each. But this knowledge was lost when Barbarians destroyed this civilization.

5000 BC  
7000 yrs ago

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The first corn known to exist was identified from archaeological evidence.

Over a period of a few millennia pre-Columbian peoples bred most of the major varieties of corn that exist today, including red corn, blue corn, yellow corn, field corn, sweet corn, dent corn, flint

corn, flour corn, pod corn, and popcorn.

By 1492 - Between 200 and 300 varieties  
of corn were already in cultivation

The oldest cobs were only about 1 inch  
long & bore only 50 to 60 kernels.

5000 BC

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Artifacts excavated at ERIDU  
date from Before 5000 BC fixing  
it as Mesopotamia's oldest  
city

c 5000 BC

@ FAYUM A sub

Domesticated animals included  
sheep, goat, cattle and pig.

The people baked their  
pottery, but no pottery wheel  
milling stones for grinding  
grain.

5000 BC

Egypt

Cultivation of emmer wheat,  
barley, and flax began to  
replace nomadic herding.  
Lined by fields, villages clinging  
to sandy ridges between  
branches of the river

C5000BC

ERIDU. Ancient city of SUMER  
Dated from 5000 BC.

A temple discovered there  
probably dedicated to the  
water-god EA.

5000 B C

People of UR, Mesopotamia had a high degree of culture. From this city, Abraham is supposed to have departed to become father of the Hebrews. From cuneiform tablets we know that these people of the EUPHRATES valley had a calendar with a 7-day week, a day with 12 periods of 2700 hours each, but this knowledge was soon

lost to the world when barbarians  
destroyed the early civilizations

c 5000 Bc

Irrigation was introduced leading  
to the establishment of settled  
organized societies, at first villages,  
then towns and cities

c. 5000 BC

Woven cloth was in use  
in Mesopotamia

5000BC

Standard date for the start of the YANGLI - SHAO  
millet, cultivating culture, possibly  
ancestral to the core "HAN" Chinese -

5000 BC

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Humans arrived in CUBA

5000 BCE

CELTIC

Beginning of long summers and  
mild winters, probably  
throughout the world.

5000 BC - 4000 BC

THE EGYPTIAN CALENDAR,  
REGULATED BY SUN & MOON:  
360 DAYS, 12 MONTHS OF 30 DAYS EA.

c. 5000 BC

The Sumerian language was in use by 5000 BC.

5000 BC

Farming settlements found in  
lower Mesopotamian plain date  
c 5000 BC

? 5000 BC

Chicken domesticated - Southern Area

Totopago (Sorobc)

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Gardeners with their cattle  
reached the Nile River.

5000 yrs ago (3000 BC)

The domestication of donkeys and camels around 5000 yrs ago made long-haul trading easier, notably carrying supplies of tin for alloying with copper to make tin bronze that came into general use in southwestern Asia by 5000 yrs ago (3000 BC). It was no better than arsenic bronze, but less likely to poison the metalsmiths. Some say the tin came

from Afghanistan, others from Malaya in  
southeastern Asia; at any rate, between  
Malaya and Mesopotamia bronze-using  
cities of the Harappa culture sprung up  
in Pakistan and northwestern India  
about 4900 yrs ago (2900 BC). That was  
a time of rapid warming, when a four-  
meter rise in sea level caused flooding,  
including the biblical flood of Mesopotamia.

c 5000BC

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Woven cloth invented in Mesopotamia

? 7000 yrs ago = 50m BC

Sugar cone domesticated

5000 BC  $\rightarrow$  3000 BC

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New (Neolithic Age) Stone Age  
prehistory period marked by  
advances in agriculture,  
domestic crafts, superior  
stone tools and invention  
of the wheel and axle.

5,000 BC

ARCHAIC Era in TX.

Used more plant foods than earlier people: roots; seeds, nuts and berries.

More tools; flint weapons points, scrapers, knives, axes, choppers, picks and drills from stone or bone. Stone beads and pipes; stone mortars.

and pebbles.

Tamed the dog.

Crude shelters: caves and ledges  
in rock formations.

5077 BC

Agriculture began in  
the New World began in  
middle and South America  
the most important plant was  
corn; also white potatoes;  
sweet potatoes, several kinds  
of beans, squash, pumpkin,  
peanuts; some tomatoes.

5000BC WILDUR

Nile Bronze Culture

5000-4000 BC

The EGYPTIAN Calendar, the  
first known based on 365 days  
(12 mos of 30 days and 5 days  
of festival, starting with the  
the day of SIRIUS (the dog star), rises  
in line with the sun in the  
morning, which coincides with  
the annual flood of the Nile. (from  
astronomical Calc as early as 4241 although  
it may be about 1500 years later

4241  
1500  

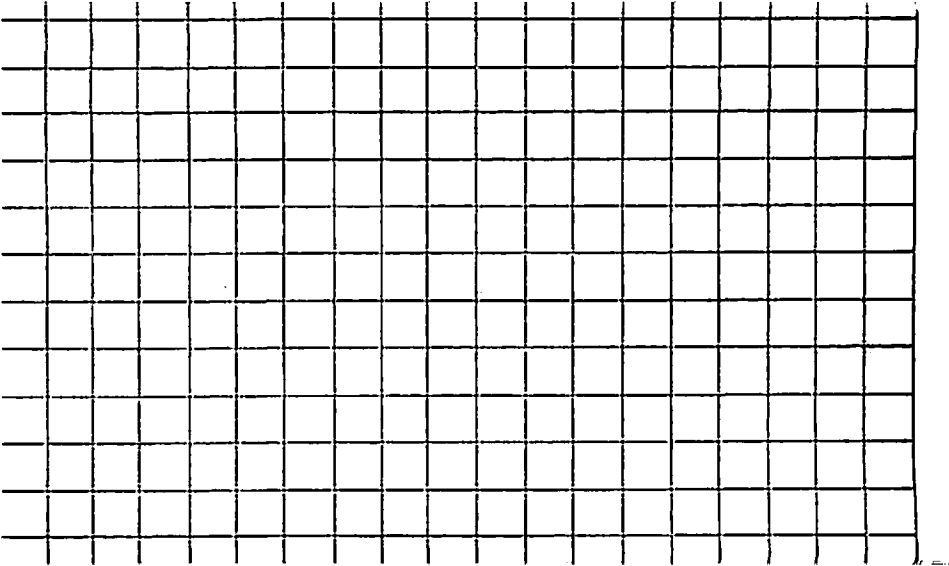
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2741

[illegible]

5000-4000 BC

the horse is domesticated in the  
UKRAINE (USSR)



5070 B C

sea divide Britain from rest  
of Europe.



5000BC

Use of copper in Mesopotamia begins

5000 B.C.

SUMERIAN S settled near  
the TIGRIS & EUPHRATES rivers  
Developed a true city life  
city-states included UR UK  
and LAGASH. Fine bldgs &  
public water supply

5000 BC

The sea divides Britain from  
rest of Europe.

5070B C

Rising sea level severs last  
land bridge between Britain and  
mainland Europe, 1st  
settlements in fertile river  
valleys of SUMER

4900 BC

Sailing craft. Mesopotamia (model  
at Eridu). ~~best~~ Chinese advances  
included the sternpost rudder.

50AD

4900B c

Corn cultivated in Mexico

4900 BC

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Corn cultivated in Mexico.

6,900 yrs = 4,900 BC

Wind energy (for boats)  
Summer

4800BC

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Oldest known massive stone  
monument built in Brittany

4800BC

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Oldest known massive  
stone monument build  
in Brittany

C48003e

1912Dates J-BK

Man emerged from darkness of  
prehistory, in the valleys of the Nile,  
Tigris, Euphrates

4777-4514 BC (Petrie's date)

MENES (4800 BC?)

Egypt

First king of 1st dynasty  
consolidated North & South Kingdoms  
into one.

First word of all Egypt  
He founded Memphis

4750 BC

Carbon 14 indicates JARMO  
is more recent than Jericho but  
later dating pushed Jericho's  
dating back to 6750 BC

JAN. 1, 4713 BC

JULIAN DAYS

AT noon begins with number  
0, i.e. 0 = Jan 1, 4713 BC noon G.M.T.

1 = Jan 2, 4713 BC noon

2 = Jan 3, 4713 BC noon

noon GMT, i.e. London

Julian day number

Was this Jan 1? my question

Ans = NO. If not, JDO = JAN 1 <sup>noon</sup> started

Jan. 1, 4713 BC

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Beginning of the Julian Period.  
= Julian day 0  
= Jan 1, - 4713 \*  
= Monday

Note 1 BC = year 0.

Jan 1, 4713 BC

Began the Julian Period

4700 BC

1912 Dates J-BK

ATHOTHS - 2nd king of <sup>Egypt</sup> 1st Dynasty  
Built at Memphis.  
wrote medical works.

C4700BC - 4550BC

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Pyramids were used to determine  
the solar year

c4700 - 4550 BC

Pyramids used to determine the solar year.

4650 BC (?)

1912 Dates J-BK

EGYPT  
UNEFES - 4th king. of 1st Dynasty  
Built pyramids near KOKHOM, I  
perhaps at SAKKARA

A great plague reigned in  
EGYPT.

4600 BC

SEMPSES - 7<sup>th</sup> king of <sup>Egypt</sup> 1<sup>st</sup> Dynasty  
Credited with many wonders

Pestilence in Egypt

4514-4212 BC

1912 Dates - J-BK

2nd Dynasty in Egypt (according to  
Petrie)

C 4500 BC

1912 Dates J-BK

Babylonia

URUK AGIN~~IA~~A, - 1st king of  
SHIRPURIA (as yet known). He built  
& restored Temples. Supplied his  
city with water by Canal

He was succeeded by LUGAL-SHUGGUR  
then he was succeeded by GURSAR  
then GUNIDU was 2nd of GURSAR

Prior to 4500 BC

1912 Dates - J-BK

Babylonia

Inhabited by a Sumerian people  
well advanced in civilization

EN-SHAR-KUSH-ANA - Lord of the  
KENGIR (old name of Early Babylonia)  
reigned at ERECH, the capital and  
was patesi (chief priest) to the  
great god EN-LIL at the temple  
of NIPPUR

The Sumarians of KENGI conquered  
ENNE-UGON, the King of the KISH, to the  
north & took rich spoil

4500 BC

1912 Dates - J-BK

DYNASTY OF SHIRPURIA <sup>Babylonia</sup> (Semites)  
The kingdom of SHIRPURIA, with its  
chief city SUGIR (The Shinar of the  
Genesis xi), was in full power and  
dignity @ 4500 BC

4500 BC

Copper smelted in eastern Europe: copper objects used as status symbols.

Rich individual burials in eastern and central Europe, some containing spectacular gold metalwork (Varna)

Cattle used as plow animals: lower Danube  
First megalithic tombs built in western Europe

4500 BC

Earliest plough marks found in Mesopotamia

Agriculture begins just south of Ganges Valley (eg Mahagara and Chopani-Mando). Native rice cultivated, pottery with corded decoration made.

First use of sail in Mesopotamia

"heliacal rising" of SIRIUS (i.e. its appearance just before sunrise, after having been invisible for a number of days) came a day later every 4 years and in this way, the Egyptian calendar diverged by 6 hours annually from the actual calendar of the sky. The Egyptians never corrected this error. Many years later (in 46 BC) the

4241 BC  
WILL DURANT - VOL I - EGYPTIAN CALENDAR

The Egyptians distinguished between planets and fixed stars, noted in their catalogue stars of the fifth magnitude, and charted what they thought were the astral influences of the heavens on the fortunes of men. From these observations, they built the calendar which was another of Egypt's greatest gifts to mankind. They began by dividing the year

into 3 seasons of 4 months each: ① the rise, overflow and recession of the Nile, ② the period of cultivation and ③ the period of harvesting. To each of these months they assigned 30 days (as being the most convenient approximation to the lunar month of  $29\frac{1}{2}$  days). Their word for month like ours, was derived from their symbol for the moon. At the end of the 12th month, they added 5 days to bring the year into harmony with the Nile & the sun.

As the beginning of the year they chose the day in which the Nile usually reached its height and on which, originally, the great star SIRIUS (which they called (SOTHUS)) rose simultaneously with the sun. Since their calendar showed (or allowed) only 365 (instead of  $365\frac{1}{4}$ ) days to a year this

Since this dynasty is unquestionably earlier than 1321 BC, the Calendar must have been established in 2781 BC. or 4241 BC, or still earlier. The older date - once acclaimed as the first definite date in history, has been disputed by Professor SCHARFF, and it is possible that we shall have to accept 2781 BC as the approximate birthdate of the Egyptian

(EGYPT CAL)  
Greek astronomers of Alexandria, by direction of Julius Caesar, improved this calendar by adding an extra day every fourth year. This was the JULIAN Calendar. ②

Under Pope Gregory XIII (in 1582) a more accurate correction was made by omitting this extra day (29 Feb) in century years not divisible by 400. This is the Gregorian Cal. that we use today.

since the heliacal rising of SIRIUS occurred one day later every 4 years than the Egyptian Cal. demanded, the error amounted to 365 days in 1460 years. on the completion of this "SOTHIC CYCLE" (astro-Egyptian called it) the paper calendar and the celestial calendar agreed again. Since we know from the Latin author CENSORIUS, that the heliacal rising of SIRIUS coincided in 139 A.D. with the beginning of the Egyptian Cal. year, we may presume that a similar coincidence occurred every 1460 years previously - i.e. in 1321 BC, 2781 BC, 4241 BC, etc. And since the Egyptian Cal. was apparently established in a year when the heliacal rising of SIRIUS took place on the 1st day of the 1st month, we conclude that that calendar came into operation in a year that opened a SOTHIC CYCLE. The earliest mention of the Egyptian Cal. is in a religious text inserted in the pyramids of the FIFTH Dynasty.

colander. This would require  
a functioning by 300 in 400  
year of the date occurred about  
(in the early part of 11th century)  
Vol 1 (and by those cards) in the  
early dynasties and the great  
pyramids. As the matter is  
very much in dispute, the  
chronology of the CAMBRIDGE  
ANCIENT HISTORY has been

Expt Cal (cont)

③

adopted by Will Decant  
in Page 8 of his Vol-1.  
(His data labelled WILCOX  
in these cards)

according to the corrected Sothic Cycle.

The next date is given by a medical papyrus written at the beginning of the 18th dynasty, to which a Calendar is added.

Here it is said that the 9th day of the 11th month of yr 9 of King AMENHOTEP I was the day of the heliacal rising of Sothis (i.e. 1538 BC). This date however is only accurate provided that the astronomical observations were taken at the old residence of Memphis; if observed at Thebes in Upper Egypt, the residence of the 18th dynasty

4242 BC

Egypt

Chronologists

SOThic Cycle

As the civil Cal. of the ancient Egyptians consisted of 12 months (ea. of 30d) and 5 odd days (called epagomenal days), the civil yr was a quarter of a day too long in relation to the rising Sothis, so that the new yr (rising of Sothis) advanced by one day every 4 yrs. New yrs. day and the rising of Sothis coincided again only after approximately 1,460 yrs, the so called Sothic cycle. Dated documents mentioning the rising of Sothis can

translated into present calendar by multiplying the number of days elapsed since the first day of the year by 4 and subtracting this sum from the date of the beginning of the particular Sothic Cycle. The dates for the start of each Sothic cycle are fortunately known because the Roman historian CENSORINUS fixed the coincidence of New Year's Day and heliacal rising of Sothis in AD 139. Taking into account a slight difference between a Sothic yr and a yr of the fixed stars, the years

1322, 2782 and 4242 BC are taken as starting points of a Sothic cycle

There are 6 Egyptian documents extant giving Sothic dates, but only 3 of these are of value. The oldest is a letter from the town of Kahun warning a priest that the heliacal rising of Sothis will take place on the 16th day of the 8th month of year 7 of a king who according to internal evidence is Sesostrius III of the 12th dynasty. This date corresponds to 1866 BC

accuracy. There is some doubt. Sometimes even modern data given by the same Papyri<sup>us</sup> contradicted themselves. There were faulty or inaccurate observations.

### Egypt Chronology ②

the date must be lowered by 20 years (i.e. 1578 BC).

The 3rd Sothis date shows that Sirius rose heliacally sometime during the reign of Thutmose III, which lasted for 54 yrs, on the 28th day of the 11th month; Sothis yr 1458 BC (point of observation at Memphis), or 1438 BC (point of observation at Thebes) must have belonged to the reign of this king. From these dates, it is

possible to calculate the absolute dates for the reigns of the 12th Dynasty, as the duration of most of the reigns of the kings belonging to this dynasty are preserved on the king list of the Turin Papyrus. On the other hand chronologists are able to compute the reigns of the kings of the 18th dynasty by utilizing the highest dates of their documents and the figures preserved by Manetho. Historians are also helped by the fact

that Egyptians sometimes identified a certain day as "exactly New Moon"; they reckoned new moon from the morning after the last crescent of the waning moon had become invisible in the last part before sunrise. As there is a 25. yr lunar cycle, such Ancient Egyptian moon dates could be calculated with a fair amount of certainty but of course only if the Ancient Egyptians themselves observed the celestial phenomenon.

4500 BC → 31 BC

1912 Dates J-BK

Ancient or Pagan Period of  
Egyptian Art & Architecture

Over 100 of the ponderous pyramids  
and mastabas were built

Mastabas were designed for persons  
not of royal birth

Ca. 4500 → 3000 BC  
CHINA

Neolithic culture called  
HONG SHAN

C4500- 3110BC

Prehistoric Period

Egypt.

Richard A. Parker

c 4500 BC → 3000 BC

Egypt

A flare for decoration appeared in early pottery. Predynastic vessels bore incised geometric designs, molded hippopotamuses and crocodiles, and painted motifs such as oared boats, ostriches, and dancers. Pottery was plentiful all over Egypt.

4500 BC

## Jericho

Another (3rd) group of people took possession of the site. The site was occupied more or less continuously until the middle of the Late Bronze Age, when the city was devastated. This is too early to be attributed to Joshua. The site was abandoned until the 7th century BC, a date that is too late to coincide with the

reoccupation mentioned in I Kings 16.34  
as having occurred in the 9th Century BC

4550 → 4500 BC

A great technological leap came in the Levant when people first began to exploit copper in the half of the 5th millennium BC.

The CHALCOLITHIC lasted for most of 4th millennium

C. 45 m 6

Much earlier than Fourth Cen B.C.

Because of Egypt's dependence upon Agriculture, the original purely lunar Cal. must have been linked to the solar or natural year. This came about because of the behavior of the Nile.

It was thought of as dividing the agricultural year into 3 seasons. The first season was the time of inundation

The second season was the time from sowing to harvest, and the third period of low water between harvest and the beginning of the next inundation. Experience showed that each of these seasons lasted about four lunar months.

6500 years ago (4500 BC)

Hot furnaces developed from bread ovens, and pottery kilns launched a copper industry in Rumania, Bulgaria, and Yugoslavia, where metal smelted from its ores was cast into ox heads 6500 years ago (4500 BC), and within a few centuries the smiths of Europe and southwestern Asia were making hard bronzes by alloying their copper with Arsenic.

the oldest known stone buildings date from the same time; standing on the island of Guernsey, off the coast of France, a tomb marks an onset of megalithic building in western Europe.

But what turned the world upside down was the milking cow.

Ca 4500 - 3800 BC.

---

BADARIAN in Egypt.

4500 BC

---

Archaeologists discovered copper  
existed as early as 4500 BC

Tumor must  
be small

---

late 70 or 80  
wait

---

Read

May 13  
Fritzsche

Waldh - Probst

Mr. G. J. W. - Probst

c 4500 BC

---

Copper working invented -  
Rudna Glava, Yugoslavia

4500 BC WILLOW

Civilization in SUSA and KISH

4,500 BC

Copper smelting and casting -  
southeastern Europe (as beads in Rumania,  
Bulgaria, and Yugoslavia). Arsenic  
bronze occurred widely in Europe  
and southwestern Asia c 3,800 BC

4,500 BC  
6,500 Y A

People discovered in Western  
Jordan chunks of copper ore (blue)  
when heated to high temperatures  
yielded a substance stronger  
than stone for making  
tools & objects.

So began the thousand-year  
COPPER AGE, — the CHALCOLITHIC  
Period

4500 BC

1512 Dates - J=BK

Egypt(?)

BOETHOS - 1<sup>st</sup> King of 2nd dynasty

Chosen opened near BUBASTIS  
and killed many.

4500 B.C.

Some people settled where the  
River Euphrates met the sea.  
This land they called SUMER.



4,500 BC

UR floods.

C4500BC

Copper working was carried out  
in Rudna G. Slova, Yugoslavia

4500 BC

Wilder

SUSA (now SHUSHAN) city in  
Elam. - Copper weapons & tools  
cultivated grains and domesticated  
animals, hieroglyphic writing  
and business documents, mirrors  
and jewelry, and a trade dist  
reached from Egypt to India

oldest appearance of piths wheel  
✓                      ✓                      ✓ wagon wheel

Wagon later in Babylonia & still  
later in Egypt

susa survived 6000 yrs of history  
through Sumeria, Babylonia, Egypt, Assyria,  
Persia, Greece, Rome & flourished as  
late as 1400 AD  
ruined by Ashurbanipal in 646 BC

4500 BC

Egypt

Artifacts from Hundreds of graves  
dating from about 4500 BC  
belong to the Predynastic

BAODARIAN Culture, distinctive  
for its red- and-black pottery.  
Ivory spoons, human figures  
made of baked clay and imported  
goods such as malachite for eye  
paint have also been recovered.

4500BC

The innovation of NEOLITHIC culture are many: the cultivation of wheat and barley, domestication of goats, sheep, pig, and cattle, the use of fired pottery, and of polished (opposed to chipped) stone tools.

4500 BC

Semites were in the Arabian  
Peninsula

Finnish were in north of  
Russia - Norway - Sweden

Indo Europeans in Central  
Europe.

Hamites were in North Africa.  
Cushites in Africa on Horn &  
East opposite the Arabian Desert

Caucasians: Between and  
south of Black & Caspian seas.

1912Dates\_ J-BK

4466 BC

Babylonia

UR-NINA, son of GUNIDU  
built temples with lumber  
brought from the Sinai  
(about 4466 BC)

AKURGAL, son of UR-NINA (no record)  
E-ANNA-TUM, son of AKURGAL, fought  
a bloody battle against the GISHBAN  
and commemorated his victory over them  
by erecting the famous stele of the

VULTURE, (now in the Tower) in the temple  
of NON-SUNGIR.

6453  $\pm$  250 y A

4453 BC  $\pm$  250 y.

Crater Lake in Oregon was created by the eruption of an ancient volcano. The eruption burned ~~or charred~~ nearby forests.

Charcoal from a tree charred by glowing pumice was measured.

C4400 BC

1912 Dates\_ J-BK

Kenigs ruled at LA GAS H since  
about 4400 BC

704-8869

\_\_\_\_\_

C 4400BC

Babylonian  
 UR & URUK were freed from  
 the Sennuba invader by the  
 victory of E-ANNA-TUM  
 over the GISITBAN

4400BC

Domestication of horse on Eurasian  
Steppes (DER EIVKA); used for meat  
and riding

4400 BC

1512 Dates - J-BK

Egypt

KAIKCHOS - 2nd King - 2nd dynasty

Founded Bull worship at  
Memphis

4400 BC

1912 Dates - J-BK

Egypt

APIS. was worshipped at Memphis  
MNEVIS ✓ ✓ at HELIOPOLIS;

and The sacred goat ✓ ✓ at MENDES

4,400 BC

Horse domesticated

6,400 yrs ago = 4,400 BC

Crater Lake.

4400 BC

Crater Lake exploded into Crater Lake.

U441  $\pm$  115 BC connected to C5000 BC

RAYUM A

6400 y ago = 4400 BC

---

Certain human beings went pale and started drinking milk. As people advanced northward into less sunny regions, their children became liable to grow up with rickety bones. Pink skins evolved, which admitted ultraviolet rays and promoted the formation of Vitamin D, a factor in bone growth. Milk, too, was good for bones, and a bizarre genetic mutation enabled children to go on drinking

milk after weaning. These genetic peculiarities  
may have taken thousands of years to become  
normal in a population, so their origin  
is obscure. Some paleolithic lived on the steppes  
of ~~that~~ the Ukraine in Eastern Europe, where  
they began taming horses about 6400  
Yrs ago, later as speakers of URALIC, and  
especially Indo-European languages become  
as important as their mounts. But milk-drinking  
relatives, speakers of proto-semitic languages living  
with dairy cattle in the hills of northern Mesopotamia,  
where the herd is imposed upon their neighbors.

C43000C

1912Dates J-BK

EN-ANNA-TUMA I - <sup>Babylonia</sup> King -  
brother of E-ANNA-TUM

4, 300 BC

Inhabitants of southern Mexico began to cultivate maize, the major grain crop of prehistoric societies in the Americas, by at least 6,300 yrs. ago.

This is around 800 yrs earlier than previous studies showed. (Radiocarbon dates)

C4300BC

1912Dates - J-BK

Egypt

BIWOTHRIS - 3rd king of 2nd Dynasty  
legalized female succession  
to the throne

1912Dates- J-BK

C42506C

ENTEMENA, (son of EN-ANNA-TUMA I)  
OF whom there is a silver vase  
with an inscription found at  
NIPPUR

Babylonia

Ca. 4250 - 3850 BC

Late neolithic period in Egypt.

4241BC

4241BC seems to be several yrs  
too early

Rostovtzeff gives 4241 or 4238  
Breasted gives 4236BC

When it is noon in Washington DC  
it is 7PM in Memphis, Egypt.

4241 BC

Earliest known date in Egypt. May  
be when Solar Cal. was invented

4241 BC

Egyptian "civil" year or "Nile  
year" that the Egyptians began to use  
as early as 4241 BC

Twelve months of thirty days  
each could provide a useful calendar  
of the seasons if another five days  
were added to the end to make  
a year of 365 days

the "helioic rising" of Seneb, which occurred every year in the midst of the Nile's flood season became the beginning of the Egyptian year. It was marked by a festival, the fine "epagomenal day" (day outside the months), celebrating in turn the birthday of Osiris of his son Horus over the centuries it was a wandering year.

4241 BC

The heliac rising of SOTH15  
coincided with the 1st day  
of the Cal. yr. in E 9481

$$2781 + 1460 = 4241$$

rather  $-139 + 1460 = 1321$

$$1321 + 1460 = 2781$$

$$2781 + 1460 = 4241$$

$$(365 \times 4) = 1460$$

These Calc assume a yr for 0: should be

$$\begin{array}{r} 1322 \\ 2782 \\ 4242 \\ \text{etc.} \end{array}$$

There was no intercalation, so  
helical rising of solstices backed  
up one day every 4 yrs until  
in 1460 years it was back  
correct again.

4241 Bc

Earliest recorded date: origin  
of the Egyptian calendar.

4241 BC

or 4236 BC

The first accurate Calendar was established in Egypt in 4236 or 4241 BC., and there were agricultural communities long before that.

4241 BC

## INVENTION OF SOLAR CALENDAR in EGYPT

Early Egyptians in delta adopted a calendar which gave the year 365 days. But they did not put in a leap year, so that new year's day shifted one day from the astronomical date in four years and the two did not coincide again until 365 leap years - 1460 yrs -

had been messed. In the year  
AD 139, one such period or "Sothic  
cycle" came to an end; and if  
we assume that the Calendar  
had been in use for 3 cycles  
$$[(365)(4) = 1460] \times 3 = 4380; \text{ Subtract } 139$$
  
gives 4241 (my note - no yr zero. off 1 yr)

4241 BC

FIRST EXACTLY DATED YEAR  
IN HISTORY

Assumes 3 SOTHIC CYCLES  
FROM AD 139

$$[(365)(4) = 1460](3 \text{ cyc}) = 4380$$
$$4380 - 139 = 4241$$

4241 BC

Solar Calendar adopted in Egypt.  
Earliest dated event in History.

4241 BC

Duncan: Cal

Dun Cal 1998

Chronographers have calculated  
what may be the 1st date in  
human history

4241 BC

---

"Clockwork man" says Earliest  
recorded date: origin of Egyptian  
Calendar

4241 BC (should be 4239.0954 BC)

The Egyptians had carried their study of the heavenly bodies so far that they adopted a calendar which gave the year 365 days; and this invention may perhaps have been made in 4241 BC.

They reckoned 12 months of 30 days with five holidays over. But they did not put in a leap year to correct the error of a quarter of a day; so that new year's day in the Calendar

shifted one day from the astronomical date in four years, and the two did not coincide again till 365 leap years — 1,460 years

"In the year A.D. 139 one such period or 'Sothic cycle', came to an end; and if we assume that the Cal had been used for 3 cycles this takes us back to 4241 BC; though 2 cycles is likely. (This may be 1456 not 1460 is likely. 21 is 1459,0318 days (sun time))

Maybe 139 AD 1317 BC and 2773 BC  
139 AD ; 1321.0318 BC ; 2780.0636

4239.0954 BC  
could do better if the fraction of yr were known 139.???

4236 BC

---

Egypt was using a  
cal. that amounted to  
365 days

4236 BC

According to Egyptologist  
J. H. Breasted, the earliest  
date known in the Egyptian  
Cal. corresponds to 4236 BC  
in terms of the present day  
system

4236 BC

---

Egyptologist J. H. Breasted says  
the earliest known date in  
the Egyptian Cal. corresponds to  
4236 BC., in terms of our  
present day system.

4236 BC

The Egyptian 365 day Calendar  
was adopted in the year 4236 BC  
according to Archaeologist James  
Henry Breasted (1865-1935)

4236BC

Earliest date on 294 pteam Col.

4236BC

According to James Harvey Breasted,  
the Egyptian Solar Cal was first set  
up in 4236BC, and this is called the  
earliest known date. This solar yr  
had 12 months of 30 days each and at  
the end of the last month 5

EPAGOMENAL (additional) days were  
introduced giving 365 days.  
Because the civil year was that

$\frac{1}{4}$  day on the solar year, the cal and the seasons showed an every - widening discrepancy with the years. By means of the heliacal rising of the star SIRIUS, the Egyptians discovered that 1,461 Egyptian years of 365 days equal 1460 solar years of  $365\frac{1}{4}$  days. This interval was known as the SOTHIACAL period.

The Egyptian day began at sunrise and their week was 10 days with 3 weeks in each month.

4236 BC

According to James Harvey Breasted  
the Egyptian Cal was 1st set  
up in 4236 BC and this is called  
the earliest known date

The solar yr had 12 mos of 30 days ea  
and at the end of the last month  
5 epagomenal (additional) days were  
introduced giving 365 days  
the DAY began at sunrise.

By means of heliac rising of SIRIUS  
the Egyptians discovered that 1461  
Egyptian yrs of 365 days equal  
1460 solar years of 365  $\frac{1}{4}$  days

$$(1461)(365) = 533,265$$

$$(1460)(365.2422) = 533,253.612$$

$$\frac{1461(365)}{1460} = 365.25$$

this interval was known as SOTHIAICAL  
PERIOD.  
their week was 10 days with  
3 weeks in each month.

4236BC

Book: Calendar by Duncan 1998  
says this was earliest recorded  
date  
Founding of the Egyptian Cal.

4236 BC

FIRST date in Egyptian Calendar

4212-3998 BC

1912 Dates. J-BK

Egypt

III 'rd Dynasty (Petrie)

C4212BC

Sesakhis was 7th king of Egypt  
2nd dynasty.

Said to have been over 8 ft in  
height

4200 BC

Copper mines in eastern Europe  
(AIBUNAR and RUONA GLAVA), the earliest  
known copper mines in the world.

C 4170 BC

1912 Dates - J-BK

Egypt

Libyans revolted in reign of  
NEK HEROPES, but submitted  
through fear caused by increase  
of the moon (probably after an eclipse)

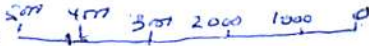
C 4150 B C

Egypt

TOSORTIHROS - 2nd king of 3rd  
Dynasty, a great physician.  
He built the 1st houses of  
hewn stone.

Copper tools for the workmen  
were introduced

c 4100 BC



Assyria

Remains of neolithic pottery from  
1st half of 5th millennium BC are  
found at NINEVEH and elsewhere  
in Assyria

2400 be

Water sorghum and rice cultivation  
in Sudan.

C4100 BC

1912 Dates J-BK

Babylonia

Dynasty of ERECH began  
UKUSH, a paler of GISHBAN, (high priest)  
was founder of this line.

C 4100BC

1912 Dates J-BK

Babylonia

EN-ANNA-TUMA II 1 son of ENTEMEHA  
is last of the line of SHIRPURIA  
until its revival 300 yrs later

C4100BC

1912 Dates. J-BK

Workers were organized into  
groups and trades <sup>Egypt</sup>

Stone Architecture was begun

4100 BC → 3500 BC

CAMPIGNIAN Culture  
Chiefly France & Belgium  
/

4100 BC  $\rightarrow$  3000 BC

---

Colder Climate

C4050BC

1912Dates J-BK

Babylonia

LUGAL-ZAGGISI, son of UKUSH,  
made ERACH his capital of the now  
united Babylon~~ia~~ and Nippur  
remained the religious center  
C4000BC He extended his empire  
to the Mediterranean Sea. He claimed  
to rule from Persian Gulf to the  
Lake of Van.  
Rulers pay homage to god of Nippur

and ascribe their victories to them

4032 B.C.

---

One Christian's date for the CREATION

4032-3946 BC

Christian date for Creation

C 4010 BC

---

5th Millennium BC

Egyptians figured out a 365-day year apparently when someone planted a stick on the shoreline of the Nile to measure the high point of the river's annual flood, which falls at the same time each year.

they created a solar Cal  
before they raised the Pyramids

Oct 1, 4008BC

---

Began the Mundane Era

#004BC Oct. 26, 9 AM

In middle of 17th cen  
Bishop (Anglican Church) James  
Ussher calculated the earth was  
created in year 4004 BC by  
careful study of genealogies  
in the Bible

Scholars checked his methods  
& declared the earth was created  
9 AM Oct. 26, 4004 BC.

Oct. 4, 4004 B.C.

Archbishop of Armagh JAMES  
USSHER (or USHER) said the  
world was created at  
nine o'clock in the morning  
on Oct. 4, 4004 B.C.

22 Oct 4004 BC

SAT?

Bishop Usher said  
in 1650 that the above  
date was Sat & Creation  
of man.

Oct. 26, 4004 BC

Bishop Usher through calculations  
based on Biblical data placed  
the creation of the earth  
at 9:00 A.M. in the morning  
of Oct. 26, 4004 B.C.

26 Oct 4004 BC

Dr John Lightfoot of Cambridge  
England corrected Bishp Ussher.

It was he who specified  
9 AM 26th Oct 4004 BC.

(not Bishop Ussher).

Bishop Ussher specified 4004 BC  
but not the day

4004 BC

Annales Veteris et Novi Testamenti  
traces in the Bible (1650-54), that  
fixed the beginning of the world  
at 4004 B.C., by the Anglican  
Archbishop of Armagh, James  
Ussher (Jan 4, 1581 - Mar 21, 1656)



WED. 21 MARCH 4004 BC

Date calculated in 16th century  
by Archbishop USHER by taking  
the Jewish date of the flood (2348 BC)  
and adding to it the age of each  
Patriarch when he beget a son  
together with other information from  
Book of Genesis. It was the  
middle of the nineteenth century  
before it was believed the Archbishop was wrong.